

TWO NEW SPECIES OF *EUPATORIUM* (ASTERACEAE) FROM NUEVO LEON, MEXICO

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ABSTRACT

Two new species belonging to the *Koanophyllon* group of *Eupatorium* are described: *Eupatorium galeanum* B. Turner and *E. hintoniorum* B. Turner. Both occur in pine-oak woodlands in the area southeast of Galeana, Nuevo León. *Eupatorium galeanum* is closely related to *E. reyrobinsonii* B. Turner, and *E. hintoniorum* is closely related to *E. richardsonii* B. Turner. A key to these four taxa is provided, along with a map showing their distribution.

KEY WORDS: Asteraceae, *Eupatorium*, *Koanophyllon*, México

Routine identification of Mexican Asteraceae has revealed two novelties, both of which appear closely related to *Eupatorium reyrobinsonii* and *E. richardsonii*. A key to these several taxa follows:

- 1. Petioles mostly 2-12 mm long.(2)
- 1. Petioles mostly 12-30 mm long.(3)
 - 2. Receptacle pubescent; heads 6-8 mm high. *E. reyrobinsonii*
 - 2. Receptacle glabrous; heads 4-5 mm high. *E. galeanum*
- 3. Leaves cordate to subcordate; achenes hispidulous, not glandular; Nuevo León. *E. hintoniorum*
- 3. Leaves ovate to lance ovate; achenes to some degree glandular pubescent; Tamaulipas, San Luis Potosí, Querétaro, Hidalgo. *E. richardsonii*

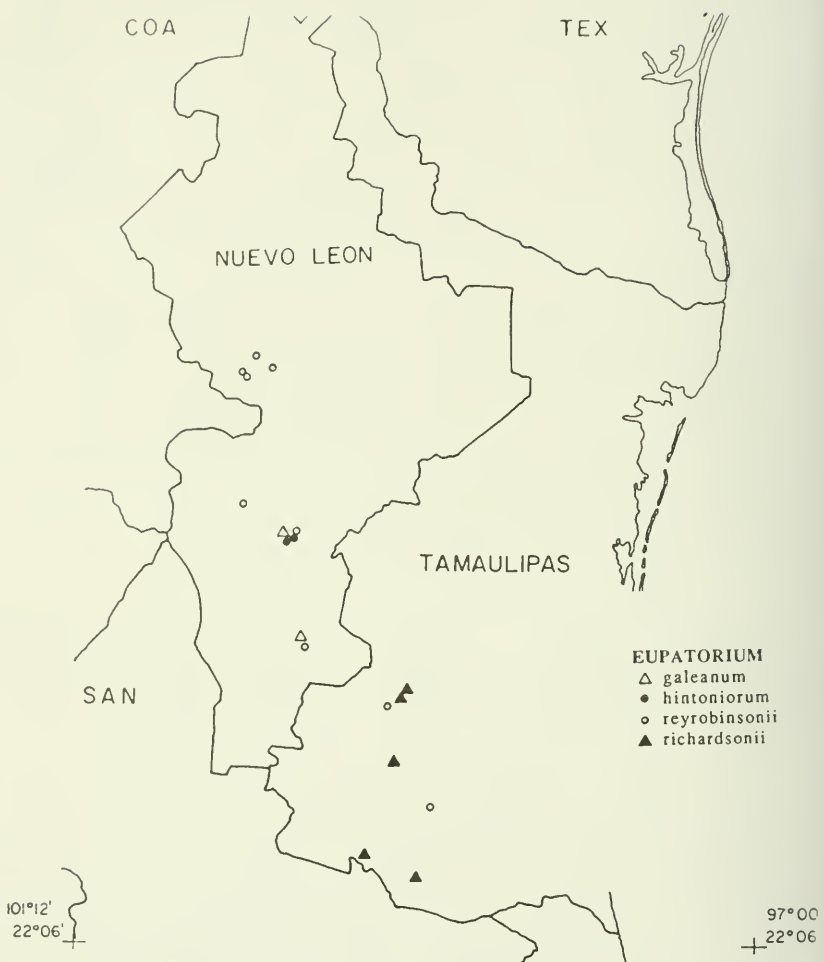


Fig. 1. Distribution of Eupatorium spp. in Nuevo Leon and Tamaulipas.

Eupatorium galeanum B. Turner, *spec. nov.* TYPE: MEXICO. Nuevo León: Mpio. Galeana, Río de San José (ca. 24° 34' N, 99° 50' W), oak woods, 1535 m, 24 Sep 1991, *G.B. Hinton et al.* 21512 (HOLOTYPE: TEX).

Eupatorio reyrobinsonii B. Turner similis sed foliis plerumque cordatis (vs. ovatis), capitulis minoribus (4-5 mm altis vs. 6-8 mm), et receptaculis glabris (vs. pubescentibus) differt.

Erect or somewhat sprawling shrubs or shrublets, 0.6-1.5 m high, stems green, puberulent. Leaves opposite, mostly 4-6 cm long, 2-4 cm wide; petioles 3-7 mm long; blades mostly cordate to subcordate, trinervate from the base, moderately puberulent beneath, the surfaces glandular punctate, the margins serrate. Heads 4-5 mm high, arranged terminal in ascending corymbose panicles, the ultimate peduncles bracteate, mostly 1-4 mm long. Involucres 3-4 mm long, the bracts subimbricate in 2-3 series, stiffly erect, linear-lanceolate, 2-3 nervate, the apices narrowly acute and pungent, not at all scarious. Receptacle somewhat convex, glabrous. Florets ca. 20 per head; corollas greenish white, somewhat tubular, gradually flaring upwards, ca. 2.5 mm long, the tube ca. 0.3 mm long, the lobes atomiferous glandular, broader than long. Anther appendages obtuse, ca. as long as broad. Style branches smooth, markedly oblanolate or clavate apically. Achenes black, ca. 3 mm long, hispidulous, the pappus of 30-40 barbellate bristles 2.5-3.0 mm long.

ADDITIONAL SPECIMEN EXAMINED: MEXICO. Nuevo León: Mpio. Iturbide, Iturbide to Camarones, pine-oak woods, 1580 m, 6 Sep 1991, *Hinton et al.* 21396 (TEX).

The species is apparently most closely related to *Eupatorium reyrobinsonii* from which it differs in possessing cordate to subcordate leaves (vs. ovate), smaller heads and more markedly nervate, rigid involucre bracts, and glabrous receptacles (vs. pubescent). Both of the only two known collections have been obtained in the same general vicinity, just south of Iturbide, Nuevo León. *Eupatorium reyrobinsonii* is more widespread than *E. galeanum*, but it does occur with or near the latter, having been collected 12.5 km south of Iturbide along a moist stream bed amongst mossy boulders (*Sundberg 1883* [TEX]).

Eupatorium hintoniorum B. Turner, *spec. nov.* TYPE: MEXICO. Nuevo León: Mpio. Arramberri, N of Arramberri, pine woods, 950 m, 30 Nov 1989, *G.B. Hinton et al.* 20037 (HOLOTYPE: TEX).

Eupatorio richardsonii B. Turner similis sed foliis cordatis vel subcordatis (vs. ovatis vel lanceolati-ovatis) et acheniis hispidulis (vs. glandulosi-pubescentibus) differt.

Stiffly erect shrub or shrublet 0.5-1.5 m high. Stems reddish, terete, puberulent. Leaves on primary shoots opposite, mostly 5-8 cm long, 3-5 cm wide; petioles 1-2 cm long; blades decidedly cordate to subcordate with 3 principal nerves arising from the base, minutely puberulent to subglabrous, the undersurfaces markedly glandular punctate, the margins weakly serrate to nearly entire. Heads numerous, arranged in terminal somewhat rounded capitulescences, the ultimate peduncles mostly 1-5 mm long. Involucres mostly 4-5 mm high, the involucre bracts 2-3 seriate, subimbricate, linear-lanceolate, puberulent. Receptacle plane, sparsely pubescent. Florets 10-12 per head, the corollas 4-5 mm long, yellowish-white, narrowly funnelform, the tube grading into the throat, the lobes ca. 0.25 mm long. Anther appendages obtuse, ca. as long as wide. Style branches linear. Achenes ca. 3 mm long, 4-5 ribbed, sparsely hispidulous, the pappus of 25-30 tawny or purplish barbellate bristles ca. 4 mm long.

ADDITIONAL SPECIMENS EXAMINED: MEXICO. Nuevo León: Mpio. Galeana: La Poza to Río de San José, 1775 m, 1 Nov 1991, *Hinton et al.* 21745 (TEX), 21749 (TEX). Mpio. Iturbide: Iturbide to Camarones, pine-oak woods, 1580 m, 6 Sep 1991, *Hinton et al.* 21657 (TEX).

The relatively thick, markedly cordate to subcordate leaves and hispidulous achenes readily distinguish this taxon from its closest relative, *Eupatorium richardsonii*, which has ovate to lanceolate ovate leaves and glandular pubescent achenes.

Five separate collections of this species have been made, all by the Hinton (Jaime and George, son and grandson of the early Mexican collector G.B. Hinton). The specimens were obtained from both calcareous and gypseous soils in the canyons along secondary roads between Iturbide and Arramberri, Nuevo León.

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